

What is claimed is:

1. A method of mounting a semiconductor laser device which comprises steps of heating a bonding member on a submount to be fused by heating a table where said submount is mounted, holding a semiconductor laser component by a collet and pressure bonding said semiconductor laser component in a loading position on said submount by said collet to mount said semiconductor laser component on said submount;

wherein the step of pressure bonding is carried out so as not to transfer any heat substantially from said semiconductor laser component to said collet, and the step of heating is terminated while keeping the pressure bonding for a semiconductor laser component to said submount by said collet.

2. The method of mounting a semiconductor laser device according to claim 1, wherein so as not to transfer any heat from said semiconductor laser component to said collet, said collet is heated to a substantially the same temperature as that of said table while said table is heated.

3. The method of mounting a semiconductor laser device according to claim 1, wherein said collet is maintained at a temperature higher than said heating table until said bonding member solidifies completely.

4. The method of mounting a semiconductor laser device according to claim 1, wherein said semiconductor laser component is heated to substantially the same temperature as that of said collet before said semiconductor laser component is hold by said collet.

5. The method of mounting a semiconductor laser device according to claim 1, wherein said semiconductor laser component is released from said

collet when a part of said bonding member solidifies.

6. The method of mounting a semiconductor laser device according to claim 5, wherein said bonding member comprises two or more kinds of the materials having different fusing points.

5 7. The method of mounting a semiconductor laser device according to claim 5, wherein a part of said bonding member is solidified by means of forced air cooling during pressure bonding of said semiconductor laser component by said collet

8. The method of mounting a semiconductor laser device according to
10 claim 1, wherein said bonding member has a fusing point lower than that of an eutectic solder.

9. The method of mounting a semiconductor laser device according to claim 1, wherein after said bonding member solidified, the bonding member is heated again higher than the fusing point.

15 10. The method of mounting a semiconductor laser device according to claim 1, wherein said collet has a pair of sides, which contacting side has an area larger than that of a contacting portion contacted with said semiconductor laser component.

11. The method of mounting a semiconductor laser device according to
20 claim 1, wherein said collet has a contacting side face, a part of which contacts a semiconductor laser component and is made of a material with low heat conductivity.

12. The method of mounting a semiconductor laser device according to
25 claim 1, wherein said semiconductor component is bonded near the macro-axis side thereof on said submount by said bonding members and

the remaining parts contact on said submount through a heat transmission member.

13. A method of mounting a semiconductor laser device which comprises steps of heating a bonding member on a submount to be fused by heating a table where said submount is mounted, holding a semiconductor laser component by a collet and pressure bonding said semiconductor laser component in a loading position on said submount by said collet to mount said semiconductor laser component on said submount;

wherein said semiconductor laser component is released from said collet when a part of said bonding member solidifies.

14. The method of mounting a semiconductor laser device according to claim 13, wherein said bonding member comprises two or more kinds of the materials having different fusing points.

15. The method of mounting a semiconductor laser device according to claim 13, wherein a part of said bonding member is solidified by means of forced air cooling during pressure bonding of said semiconductor laser component by said collet

16. A method of mounting a semiconductor laser device which comprises steps of heating a bonding member on a submount to be fused by heating a table where said submount is mounted, holding a semiconductor laser component by a collet and pressure bonding said semiconductor laser component in a loading position on said submount by said collet to mount said semiconductor laser component on said submount;

wherein said collet has a contacting side face, a part of which contacts a semiconductor laser component and is made of a material with

low heat conductivity.

17. A method of mounting a semiconductor laser device which comprises steps of heating a bonding member on a submount to be fused by heating a table where said submount is mounted, holding a semiconductor
5 laser component by a collet and pressure bonding said semiconductor laser component in a loading position on said submount by said collet to mount said semiconductor laser component on said submount;

wherein said bonding member has a fusing point lower than that of an eutectic solder.